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ABSTRACT

GRADES OR AGES: Kindergarten. SUBJECT MATTER: General; includes sections on language arts, writing, speaking, reading, number relationships, social studies, health and safety, art, science, music, and physical education. ORGANIZATION AND PHYSICAL APPEARANCE: The guide is divided into 23 short sections, each of which is straight text interspersed with illustrations. It is offset printed and staple-bound with a paper cover. OBJECTIVES AND ACTIVITIES: Each section on curriculum content gives general guidelines for activities based on the developmental characteristics of kindergarten children and then lists several types of activities. Introductory sections list general objectives and give suggestions on planning and scheduling. INSTRUCTIONAL MATERIALS: The guide contains a six-page categorized list of equipment and supplies needed and a bibliography of references for the teacher. STUDENT ASSESSMENT: A short section on evaluation suggests that teachers develop checklists related to program goals and use them in daily observation. Anecdotal records are also considered useful. (RT)

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Guide For Teaching KINDERGARTEN

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Twenty-First Century Citizens

By CYRIL BUSBEE

State Superintendent of Education

Today's five year old South Carolinians will live most of their lives during the twenty-first century.

These youngsters have a number of advantages already. They have watched astronauts blast off into outer space and seen much of our own planet through the medium of television. Modern transportation has afforded them a wider horizon for exploring their own community and traveling beyond its limits. Radio, hi-fi sets and tape recorders have broadened their language and musical development. The books, toys and technological wonders in their home lives have given them an enlarged store of information and stimulated their appetites for learning.

These five year olds are ready to work and play with children their own age, for social contacts with adults outside their family and neighborhood circles, for challenging mental stimulation beyond their own homes.

Kindergarten provides a vital transition from the important learning experiences of the home to the more formal learning program of school. Its curriculum is a carefully-planned sequence of activities forming the basis for the child's intellectual, physical, psychological and social development.

In kindergarten, the youngster learns to study and explore his environment, to develop skills and concepts basic to future learning, to expand his vocabulary and his vision, to work and play harmoniously with other children and adults. Kindergarten provides a year in which five year olds can deal with their expanding world at their own level and at their own pace, without pressure by emphasis on academic skills. It may well be the most important year of their lives.

South Carolina educators must make this vital bridge to tomorrow a meaningful experience for our kindergarten children. We must create an environment conducive to learning, self-confidence and self-expression. We must establish a relationship with parents of these youngsters to help each other understand the children's growth, behavior and adjustment at home and school. Thus we will assist today's children to become contributing citizens of the 2000's.

Bridge To Tomorrow

By DR. W. BRUCE CROWLEY

Director, Office of General Education

South Carolina is beginning to recognize the importance of educating the young child. This **Guide for Early Childhood Education** is offered as a first step in establishing a sound educational program for pre-first grade children in South Carolina. It is based on the belief that an effective early childhood education program will reduce failures in later grades and that children who attend kindergarten perform better in reading, arithmetic, languages, and social achievement. Development of this guide was made possible through the cooperation of the Follow Through State Technical Assistance Grant from the U. S. Department of Health, Education, and Welfare, the Southern Education Foundation, and the South Carolina State Department of Education.

As the people in South Carolina began to see that the kindergarten program was essential, Cyril B. Busbee, State Superintendent of Education, appointed an Advisory Committee on Early Childhood Education in 1967. This Committee included representatives from colleges, public schools, private kindergartens, and the State Department of Education. The Advisory Committee planned and conducted a conference on Early Childhood Education in December, 1967, co-sponsored by the State Department of Education and the Southern Education Foundation. It was attended by over 300 persons from various professions. Much enthusiasm for kindergarten programs was generated by this conference.

Mrs. Theo P. Hartin, Chairman of the Advisory Committee on Early Childhood Education, became the state's first supervisor of Early Childhood Education in May, 1968.

In July, 1968, Governor McNair released the Moody Report which recommended that South Carolina move immediately into a state program of education for four-year olds as well as five-year olds. At the beginning of the 1968-69 school year, approximately 75 kindergarten classes were initiated, mostly with the assistance of federal funds.

It is our hope that this guide will give direction to the early childhood education programs as South Carolina moves to provide education for all its children in keeping with the recommendations of the Educational Policy Commission of the National Education Association.

Acknowledgments

Deep appreciation is expressed to all those who made possible the publication of this guide.

To Mr. Cyril B. Busbee, South Carolina State Superintendent of Education, for his encouragement and interest in providing educational opportunities for young children as a part of the public school system.

To Dr. W. Bruce Crowley, State Department of Education Director of General Education, and Mr. Joel Taylor, Chief Supervisor of Elementary Education, for their assistance and direction.

To the State Advisory Committee on Early Childhood Education and the Kindergarten Writing Team who helped in planning and writing this guide. They are: Dr. W. Bruce Crowley, Miss Alfreda James, Mr. M. R. Newton, Dr. Milly Cowles, Dr. Amelia Roberts, Dr. Jack Boger, Mr. Purvis Collins, Mrs. C. E. Hinson, Mrs. Lutitia Anderson, Mr. Robert S. Jones, Mrs. Anne Beckman, Dr. Anne Flowers, Dr. Kitty Daniels, Mrs. Dorothy Forsythe, Mrs. Louise Entzminger, and Miss Carole Jean Harrelson.

To college professors who served as consultants and editors of materials.

To the curriculum supervisors of the State Department of Education who contributed materials and ideas. To Miss Toni Child, editor of publications, for assistance in editing and designing the format of the publication.

To the Follow-Through State Technical Assistance Grant from the U. S. Department of Health, Education, and Welfare, and the Southern Education Foundation for funds which made possible the publication.

MRS. THEO P. HARTIN,
Early Childhood Education
Supervisor.

Objectives

The modern kindergarten, a product of years of thought, experimentation, and practice, little resembles the visualization of Friedrich Froebel of a place where there are children "growing like plants". Studying the many kindergartens in the United States would reveal practices, types of equipment, and organization unknown to the early advocates of kindergarten education.

The early kindergartens came into existence through the efforts of individuals interested in providing worthwhile experiences for boys and girls who were too young to enter the first grade. The perpetuation and extension of "preschool" education were dependent upon its popular appeal and private or philanthropic financial support.

Many early kindergartens and nursery schools were proposed to minimize the hazards of city dwelling for children under school age as well as to serve as child care centers for working parents. Others owed their establishment to those who wished to supplement the experiences of children who were deprived of desirable contacts or pleasant surroundings. Still others were organized privately to provide additional advantages for children of the wealthy. As research has added to the knowledge of child growth and development, the kindergarten has enjoyed an increased popularity that has encouraged citizens in many communities to demand provision of education of the very young.

The demands for experiences that supplement home experiences and provide opportunities for association with other children have been partially met by non-public institutions. These non-public institutions offer this service to those who are willing and able to pay for it.

On the other hand, those who feel that every child should have the opportunity of attending kindergartens have investigated possible ways to include them in the public school system. They have insisted upon legislation that authorizes the establishment of public kindergartens. The number of children attending kindergartens today is at an all-time high. Almost 100 years after the establishment of the first public kindergarten in the United States, however, many urban as well as rural areas are without public kindergarten facilities.

Questions have been raised throughout the country as to the adequacy of the educational experiences now being offered to young children. Many people express concern that too few children are being prepared to meet the challenges of the increasingly technical and complex society in which they must live. In recent years, many new concepts concerning early childhood education have emerged, and information dealing with the impact of early experiences upon the total growth of the child have been made known through published research and experimental projects. These concepts and this information, properly understood, can contribute significantly to the development of a sound kindergarten curriculum.

The kindergarten should provide an atmosphere in which the child feels

secure and confident. The surroundings will invite him to develop learnings in the cognitive, affective, and psychomotor areas. The warm, friendly climate of the kindergarten classroom promotes an opportunity for each child to develop positive concepts about himself, his peers, and his teachers. As he learns to practice self-control, to recognize the rights of others, to grow in independence, and to develop a sense of responsibility, the young child also establishes values upon which he can rely in the future. In addition, the kindergarten program provides children with opportunities to develop skills of observation, investigation, and critical thinking.

The full impact of kindergarten education upon the development of an individual is not yet realized. Generally, modern educators agree that the major purposes of early childhood education should include opportunities for young children to:

—explore the physical world;
—broaden their experiences;
—observe, respond, and experiment;
—learn the communicative skills;
—think critically and creatively;
—gain awareness of and sensitivity to aesthetic experiences;
—extend and refine their skills in human relationships;
—develop self-confidence, self-understanding, and a positive self-image;
—develop motor and manipulative skills;
—develop good health, physical and safety habits.

Available evidence seems to prove that the kindergarten demanded by today's educators must be one in which maximum attention is directed to all facets of the young child's life—with equal priority to cognitive learning, social development, physical well-being, and emotional adjustment.

Characteristics of Kindergarten Children

The story of human growth and development is fascinating but complex. It is not easy to understand children of kindergarten age. It is even more difficult to work with them to facilitate maximal growth. Children come to kindergarten in assorted sizes, shapes, and colors. They vary not only in physical appearance but also in behavior and other aspects of development. Even accurate prediction of consistent behavior for the same child would be slight.

In any attempt to understand the behavior of the developing child, it is necessary to consider many factors of influence which tend to account for the essential differences that appear. All children do not have the same backgrounds of influence.

Differences may be seen in children as a result of one or a combination of several of the following variables:

—genetically determined biological variables

—nongenetic biological variables such as lack of oxygen during birth, malfunctioning of a gland, or physical maladies

—past experiences in early months and years of life with people, language, and objects or opportunities to explore, use language, use their bodies, and manipulate objects

—their immediate social, psychological environment such as parents, siblings, and emotional factors involved with them such as trust, security, and autonomy

—their general social and cultural environment such as American, Oriental, or European and high, middle, or low socio-economic status.

While all of these elements probably do determine variations among kindergarten children, it is important not to fall into the trap of thinking that one child is different from another **merely** because he has a physical impairment, **merely** because he comes from an impoverished home, or **merely** because he has had fewer past learning experiences. Knowing the backgrounds of individual children with respect to these variables does offer a framework for planning a variety of opportunities and experiences for these children.

The process of development of the total integrated personality of the child is continuous and highly complicated. Development involves the interaction of a biological organism with his physical, psychological, and social environments. The physical, emotional, intellectual, and social components of development are not separate nor independent. They operate in relationship to one another.

Emotional factors may affect aspects of physical health, intellectual functions, or social interchange. As an example, a child who is experiencing the emotional state of fear may experience physical problems (such as stomach-ache or headache). Both his emotional and physical states may interfere with his thinking his being able to relate to other people. It is impossible to isolate the four components of development. They are chains in the link interlocked together to form what is seen as personality development and behavior.

Although variation among children the same age is wide, the pattern of growth is considered to be the same for all children. Growth seems to follow a definite, sequential pattern. There are spurts and rest periods of growth but these do not necessarily occur according to specific chronological ages.

Task performances at certain stages of growth are considered to be necessary before tasks of a more difficult level can be undertaken. Timing of such task performances will depend largely on the biological maturation of the child as well as his opportunities, experiences, and other variables of influence. However, some task performances depend upon the successful accomplishment of lower level tasks.

Historically, child psychology has often been limited to descriptions of a variety of children's behavior within certain chronological age ranges. Descriptive statements should be viewed as findings in reference to **some** children of a certain age, not taken as absolute behavior expected of **all** children of that age. Thus they can serve as guidelines for persons working with children. Some general characteristics that have been associated with children of kindergarten age are:

—height ranges from 39 to 46 inches

—weight ranges from 28 to 53 pounds. About 75% of weight increase during fifth year is due to muscular development. Although boys are only slightly heavier than girls, girls have more fatty tissue and boys have more muscle tissue

—general physical growth is slowing down

—facial features are not likely to change to any marked extent. By the end of the fifth year, children look much like they will as adults

—handedness is usually established

—the brain has reached about 90% of its adult weight although brain weight does not indicate intelligence

—myelinization of nerve fibers is generally completed in brain centers.

—shedding of baby teeth is usually apparent

—thinking aloud, self-conversation

—thinking is dominated by own personal experiences

—thinking is in terms of ongoing events, experience is judged by its end stage

—knowledge is specific but is applied universally

—reasoning proceeds from premise to conclusion in a single jump

—reasoning is limited because it is perceptually dominated

—simple problems can be solved

—fact and fancy are not always separated

—completion of task is desired

—children dress themselves

—social interests are widened, reducing egocentricity

—friends are often made on basis of similarity of interests or problems

—small group play occurs

—friendships become stronger and quarrels less frequent

—more responsibility is assumed

—self-assurance, confidence, and social conformity are developing

—impatience is often noted

—help in learning self-control is often needed

—curiosity is abundant

—discovery for self is important

—moral laws are viewed as absolutes

—words are powerful and children feel that saying something makes it so

—independence is increasing

Marie Belle Fowler has given the following description of four and five year olds:

> "Eager, active, interested, curious, questioning, exploring, investigating, untiring, are words we use to describe them as we try to picture them on paper. Their tremendous drive for physical experiencing—jumping, hanging, tumbling, running, lifting, carrying, pushing, pulling, balancing, digging—finds outlet all day long. They can't miss puddles and mud no matter what we say. Their play turns to work and back to play again as we watch their attitudes change toward what they are doing. They 'try on' life as they see it going on about them, and through this dramatic play they clarify their understandings of relationships."

Development and behavior can be modified. Experiences gained in the educational setting of the kindergarten provide the foundation for future and more extensive growth and development.

The persons charged with the responsibility of planning programs for kindergarten children must do so wisely. All four areas of growth must receive equal attention. Medical examinations are necessary so that visual, auditory, or other health problems can be discovered and remedied. Children's intellectual functioning ability should be encouraged by opportunities to develop and increase language skills, to use their existing curiosity, to learn through direct experiences, and to solve problems independently.

In their emotional and social development, the child must feel that he is respected and valued by others. He must establish a sense of trust in people around him and establish trust in and respect for himself. He must learn how to get along with others and how to balance his egocentricity with concern for and responsibility toward others. He must be afforded opportunities to express what he feels without being overburdened with guilt or shame.

Teachers of kindergarten children must be flexible in planning not one program for a group of children but many programs for many individual children. The kindergarten teacher must think in terms of many possible reasons and many possible answers for a problem. A child's behavior is influenced by much more than a specific situation at any given time. The teacher should consider several possible causes behind a situation and be willing to try several plans in order to find the most efficient strategy to help the child. Children must be afforded the freedom to grow and guided carefully by teachers who can provide appropriate experiences for maximal growth and acceptable behavior.

The Kindergarten Teacher

If only by virtue of the position that she holds in the early learning experiences of boys and girls, the kindergarten teacher is a special person.

Few, if any, would quarrel with the notion. She should possess the attractive personality traits, knowledge of subject, competencies in instruction, and intellectual ability requisite for other good teachers in the educational sequence. On the other hand, since the kindergarten teacher is among the first to introduce the child to school experiences, the desirable characteristics often listed for all teachers seem imperative.

To locate the person possessing **all** of the desired personality traits mentioned frequently in the literature would be a feat that defied solution. Equally difficult would be the ranking of those traits in the order in which they contribute to effective teaching. By talking with children, parents, and educators about those teachers who seem to them most successful in working with kindergarten children, one usually finds all or many of the following characteristics mentioned: interest and concern for young children, physical vitality, enthusiasm, cheerfulness, sensitivity to others, pleasing voice, intellectual curiosity, sense of humor, tolerance, patience, and warmth.

Generally, the state in which the public kindergarten teacher works designates the minimum requirements for certification. The program of study usually is based upon a four-year program.

The kindergarten teacher should have a thorough knowledge of her professional responsibilities to children, parents, administrators, fellow teachers, the community, and society in general. In addition, she should keep abreast of recent research in early childhood education.

In her formal preparation for teaching, it is hoped that upon a foundation of liberal education will be developed:

—a basic philosophy of education;
—an understanding of the behavior and development of the young child;
—a knowledge of the ways in which children learn;
—a sound understanding of curriculum practices and development;
—the ability to deal with groups and individuals in a relaxed, competent manner;
—the ability to recognize and categorize learning needs of children;
—an awareness of current problems and expectations in education;
—an appreciation of her role on the educational ladder;
—the desire to continue to learn.

To develop these characteristics, the kindergarten teacher should be provided with many opportunities to observe and participate in activities that illustrate the theory and discussion of the college classroom. There is little doubt that the teacher of young children must have a broad background of knowledge and professional experiences to meet the demands of the children whom she teaches.

Planning and Scheduling

The length of the kindergarten school day will vary in schools and districts. A day of two-and-one-half to three-and-one-half hours is recommended for pre-primary age children. Because of transportation and similar problems, a few districts will find it necessary to provide an all day program.

Planning and scheduling for the long school day will differ from that of the shorter day. The morning session may be similar to that of the shorter day, but perhaps a bit more leisurely. After an early lunch, the all day group will spend from 45 minutes to an hour resting. A majority of children will actually take naps, if provided cots or mats, a darkened and well-ventilated quiet room, and the right kind of supervision. The length of the rest period will vary according to whether the group is restless or relaxed.

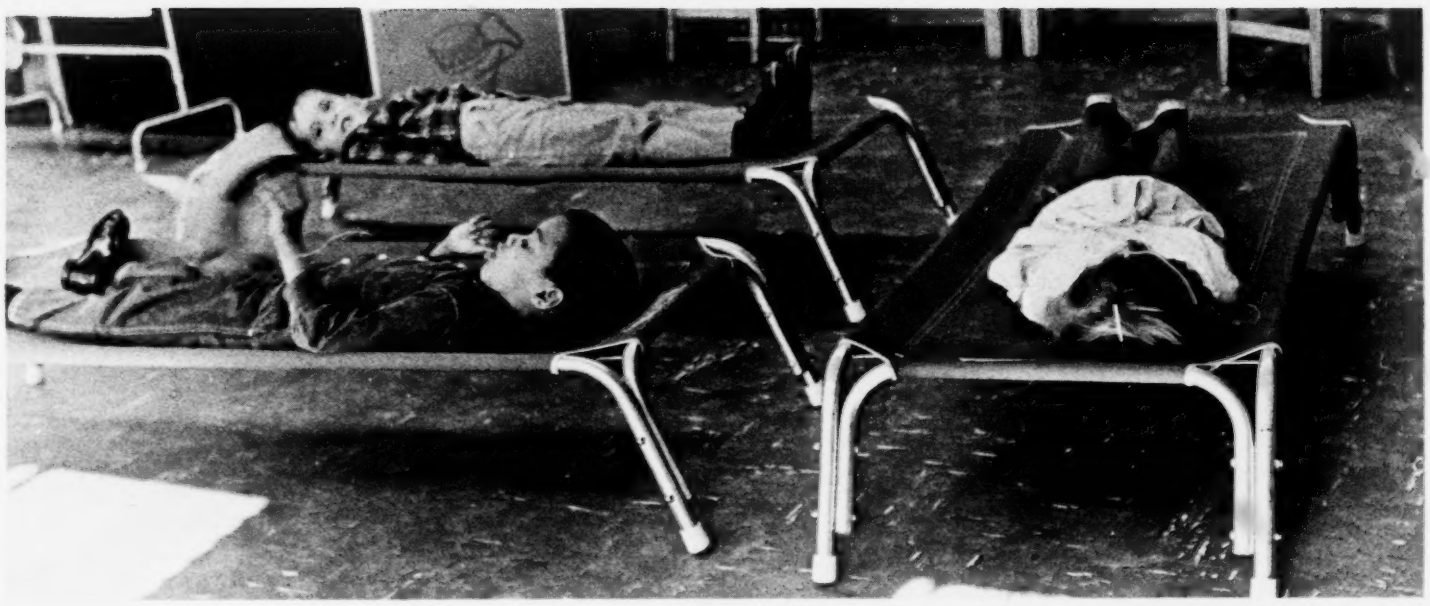
The all day group usually spends an hour or more in outdoor play in the afternoon. After a light snack, one of several group activities (listening to music, stories, viewing films, or playing quiet games) may end the day.

Whether planning for the long or short day, most teachers find it helpful to develop an overview for the year with tentative suggestions or designs for each week. The value of this long range draft is to prevent overemphasis on some type of activities or the exclusion of others. It may be difficult to balance a program in both content and activities unless some long range view is taken of the work-play life of the group.

The effective teacher recognizes that her most important function is to know and understand each child as she plans, because the daily program will be determined by the needs, interests, and behavior of the group. The wise teacher knows that a balance of activities for large groups, small groups, and individuals is needed as well as both planned and incidental learning experiences. Use of varied and multi-level materials and equipment will also be considered in effective planning.

A good kindergarten day is not organized into a rigid schedule with separate periods for the subject areas such as language arts, science, numbers, etc. However, in all the activities of a kindergarten day, there are opportunities for building good foundations and readiness for the more formal subject matter which follows in the grades.

Opportunities will be planned to allow each child to assume responsibility for his own actions, to share, to be creative, to respect the rights of others, to use materials wisely, to develop moral and



spiritual values, and to acquire good work habits and skills. It will not be possible to place emphasis every day on all the desired developments, yet all are so interrelated that many opportunities will occur each day.

In planning a program for young children, the teacher must understand, appreciate, and respect the value of play. Play is a process through which young children learn.

A program that provides large blocks of time makes it possible for children to participate freely and completely in a greater number of activities. Children move at different rates of speed. None should feel rushed yet none can be allowed to become bored. For this reason each block of time should be carefully organized. Each child should know what there is to do and that he is free to choose his activity during certain blocks of time.

Enough structure is necessary so that children will know what to expect and can feel secure and comfortable. A rigid schedule of short periods which change each day can cause the child to feel anxious, insecure, and frustrated.

Blocking of time might include:

Arrival and opening time—This may include greetings, sharing, listening, etc.

Work time: This includes planning, working, cleaning up, and sometimes sharing work. Group planning may include the entire group or small groups for the activity which will take place in the various centers (block building, using hammer and nails, playing dolls in housekeeping area, painting and drawing, working puzzles, caring for pets, enjoying books in library corner, etc.). A definite routine should be established for cleaning up. Each child should be encouraged to take the responsibility of putting away equipment or leaving the work area ready for the child who wishes to use it later.

Outdoor playtime: The outdoor play area should include equipment which will build large muscles (monkey bars, jungle gyms, balls, construction materials, sandboxes, water play equipment, and wheeled toys). This is a time for free play and exercise for young muscles.

Use of toilets: Routine, handwashing, etc.

Snack time: A quiet time should precede and follow snack time. This can be a valuable time for teaching children to enjoy different kinds of simple food. Table manners, proper setting of table, serving food, and cleaning up can also be taught.

Rest time: The rest period for the short kindergarten day can be a story time or quiet music time. Complete relaxation is desired and will often relieve tensions and frustrations.

Group activity: This can be a field trip, talking time, group singing, listening to records, playing rhythm instruments, dramatizing a story, or other activities in which the entire group participates. This is the time for the group to learn together about science, literature, art, music, etc.

Story time: Children enjoy stories. Story-telling can come any time during the day. Activities during this block can include planning for the next day or the evaluation of the present day's activities.

The key word to remember in planning and scheduling for a program for young children is **balance.** Balance between freedom and guidance, group and individual activities, and active and inactive experiences should be considered. Flexibility and adaptability to meet differing circumstances are also essential in the kindergarten program.

Program

The kindergarten program will depend partially on the philosophy and objectives that undergird the entire elementary school and partially on the philosophy and objectives that are related specifically to the kindergarten curriculum.

The education of any child is viewed as a continuous and sequential process. Since kindergarten will be the first sustained educational experience for the child outside his home environment, special considerations are made to insure that pupils are challenged but not pushed to unreasonable lengths.

Basic skills and attitudes are developed in the following areas:

1. Visual and auditory awareness and elaboration (making discriminations, and judgments, discerning possibilities, sensing new media)
2. Idea elaboration (formulating new possibilities and analyzing new and old possibilities through verbalizing, acting, dancing, exploring, experimenting, drawing, stories, and solving problems dealing with number concepts, social and cultural phenomena, and interpersonal relations)
3. Body awareness (learning directions, to perceive one-self in space, to gain body control and eye-hand coordination)
4. Self-awareness (learning that he can achieve in the new situation, that he is respected and worthy, that he can express ideas, build, and create, and that these diverse productions are accepted)
5. Social awareness (learning to share time, people, and materials, being considerate of others, working cooperatively, respecting others' property and personal rights.

Basically, young children seem to learn best through their own activity and exploration. Therefore, programs typically revolve around sensitive, well-organized teachers who evaluate children's behavior and set the stage for learning activities that help children grow in major aspects of their development. There is every reason to believe that the child's experience will leave lasting impressions by formulating basic attitudes toward school, persons outside the immediate environment, and himself as a learner. In other words, the most basic foundation for all future learning will be formulated.

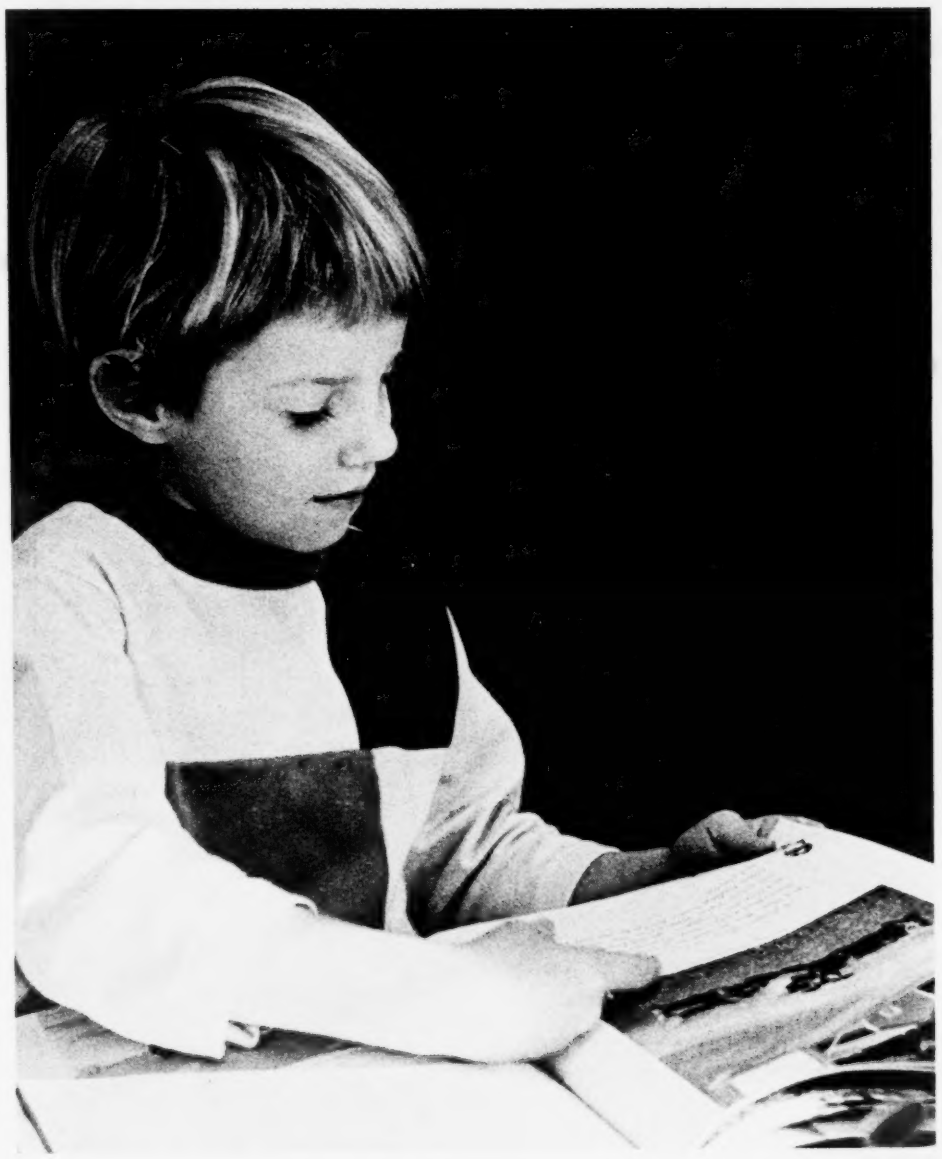
The curriculum for children below grade one consists of all the basic elements that would be expected in any other elementary school level. They are as follows:

1. Language
2. Science
3. Social Studies
4. Mathematics
5. Physical Education, Health, Safety
6. Art
7. Music

Each area of the curriculum adds to a total and balanced approach to the development of the young child and experiences in each area will be based on knowledge of their physical, social, emotional, and intellectual needs.

The listing of areas in which the development of concepts, skills, and learnings will take place in no way suggests the division of the day's schedule into specific times for the development of these skills and concepts. Activities and experiences planned for the total group, small groups, and/or individuals will be based on the fundamental and basic learnings which are necessary for a good foundation in subject areas. These activities may take place at any time or may be planned for some duration or block of time.

The curriculum is flexible and child-centered and should be planned as a part of a continuum, not separate and apart from the total school program.



LANGUAGE ARTS

The child develops language initially through imitating the persons in his environment who provide the models for speech. Language becomes the basic tool for the child to use in communicating with others. It also is essential for thinking and for mastery of one's environment. Language pervades most of the school day in all curriculum areas; however, as a subject within itself, it deserves special attention. A child (or an adult) who is deficient or limited in his use of language is usually consequently limited in his ability to think.

Although language development occurs through a plurality of methods with each component tied together intimately, the areas can be separated for curriculum development.

They usually are regarded as:

(1) Listening
(2) Speaking
(3) Reading
(4) Writing

(1) Listening

The child is able to hear sounds at birth. Shortly thereafter, at least during the first year of life, he beings listening. The human is certainly able to hear sounds without necessarily listening to them; therefore, listening may be defined broadly as making discriminations among sounds and then reacting to them.

It is easier to determine when an individual is listening actively because reactions can be observed. The task of determining when one is listening passively is more difficult. Since humans do not have X-ray eyes, passive listening may often be regarded by teachers in a negative manner. An individual's reactions to a listening experience can be so private that an outward manifestation is neither shown nor noticed. In a certain sense, passive listening (without outward reaction) can be quite active for the individual.

Since children can get along more effectively when they have well-developed listening skills, many activities should be provided in the curriculum to enhance their facility in this area. (If a child exhibits extremely poor habits, he should be checked for a hearing loss.)

The teacher serves as a model for every kind of behavior. However, he is expected especially to exhibit well-developed listening habits himself. Children are particularly conscious as to whether or not they are listened to and that their ideas are accepted.

A selection of activities that can be used to develop listening more adequately in children follow:

Appreciative listening: listening to music, poems, stories, books, peers, radio, TV, and sounds in their environment.

Purposeful listening: listening to follow directions or instructions, to move to music and rhythms, to gain information.

Discriminative listening: listening to determine changes in sounds (loud and soft, high and low and eventually to discriminating speech sounds, e.g., rhyming words, beginning sounds, ending sounds).

Critical listening: listening to understand, make decisions, formulate judgments and points-of-view, formulate questions.

It is easy for some kindergarten children to sit for ten minutes or longer in listening situations. Likewise, it is equally as difficult for others to sit for two minutes. Children should be allowed to develop this skill at different rates. Some children can listen better when they have something to hold or to work with in their hands. Teachers who expect the same behavior from all children may

fail to consider individual development. Listening stations and tape recorders are valuable instruments to augment the teacher's efforts.

WRITING

Since small muscle development follows large muscle development, being able to write without undue strain is dependent upon, among other things, muscle development. Specific writing activities are best viewed as being a part of the first-grade curriculum. If small muscle development is obvious and eye-hand coordination has been achieved, the kindergarten child can comfortably learn to write his name and perform other simple writing activities. Young children probably can spend their time more profitably in activities that precede formal writing such as block building, puzzle formations, peg-board manipulations, and free art activities.

Children should, however, learn that the spoken word is recorded through writing activities. The teacher can prepare "experience" charts and other written records for the total group or small groups. Each child's storage space can have his name printed on it conspicuously. Various objects, learning centers, and activities charts in the classroom can be labeled. These simple samples convey the idea of writing spoken words.

SPEAKING

Except in children who have severe hearing difficulties, the process of hearing and listening precedes formal language development. Rapid development of speech is seen in many children by age three. The kindergarten child may be speaking in sentences and using language adequately. Conversely, he may not be speaking in sentences or using adjectives and adverbs or even using phrases in his speech.

As in listening, the teacher serves as a model for speech development. For children who are speaking in sentences, special opportunities have to be provided to enhance language development further. This is needed particularly to offer a challenge to the child. If the child does not have adequate language development, special procedures have to be used and special exercises devised.

Specific language development activities can include the following:

(1) Conversations with peers and teachers
(2) Group discussions (small, medium, and total groups)
(3) Creative dramatics
(4) Dramatic play
(5) Story telling
(6) Information seeking and giving
(7) Role playing
(8) Brief planned episodes in language development, e.g., small units initiated by teacher on individualized basis.

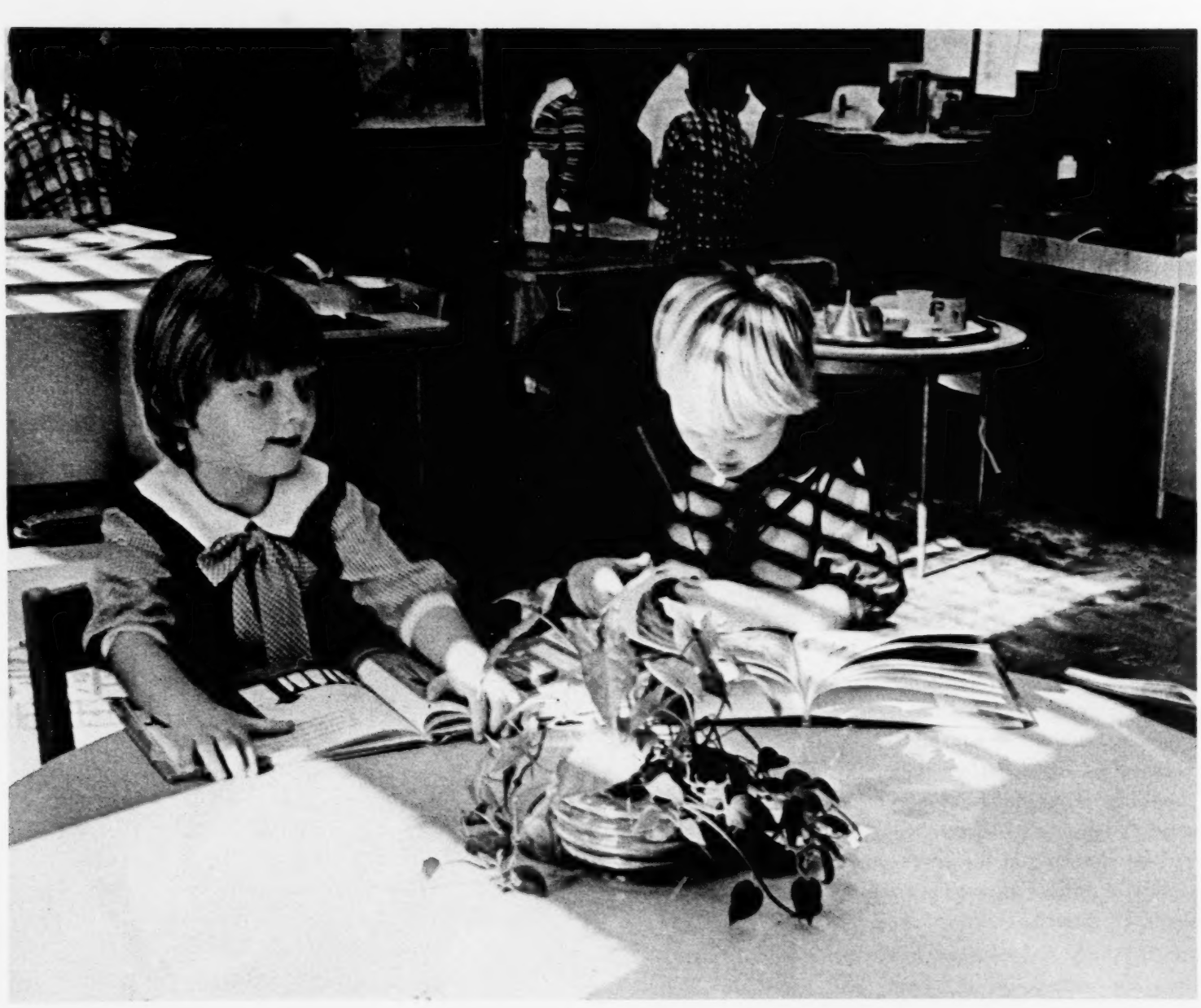
The more opportunities provided the child to engage in speaking situations, the better is his mastery of language. Close attention to children's habits and development in talking will provide the teacher with clues as to activities that can be devised and situations to be contrived. A rich environment sets the stage for more "conversation pieces."

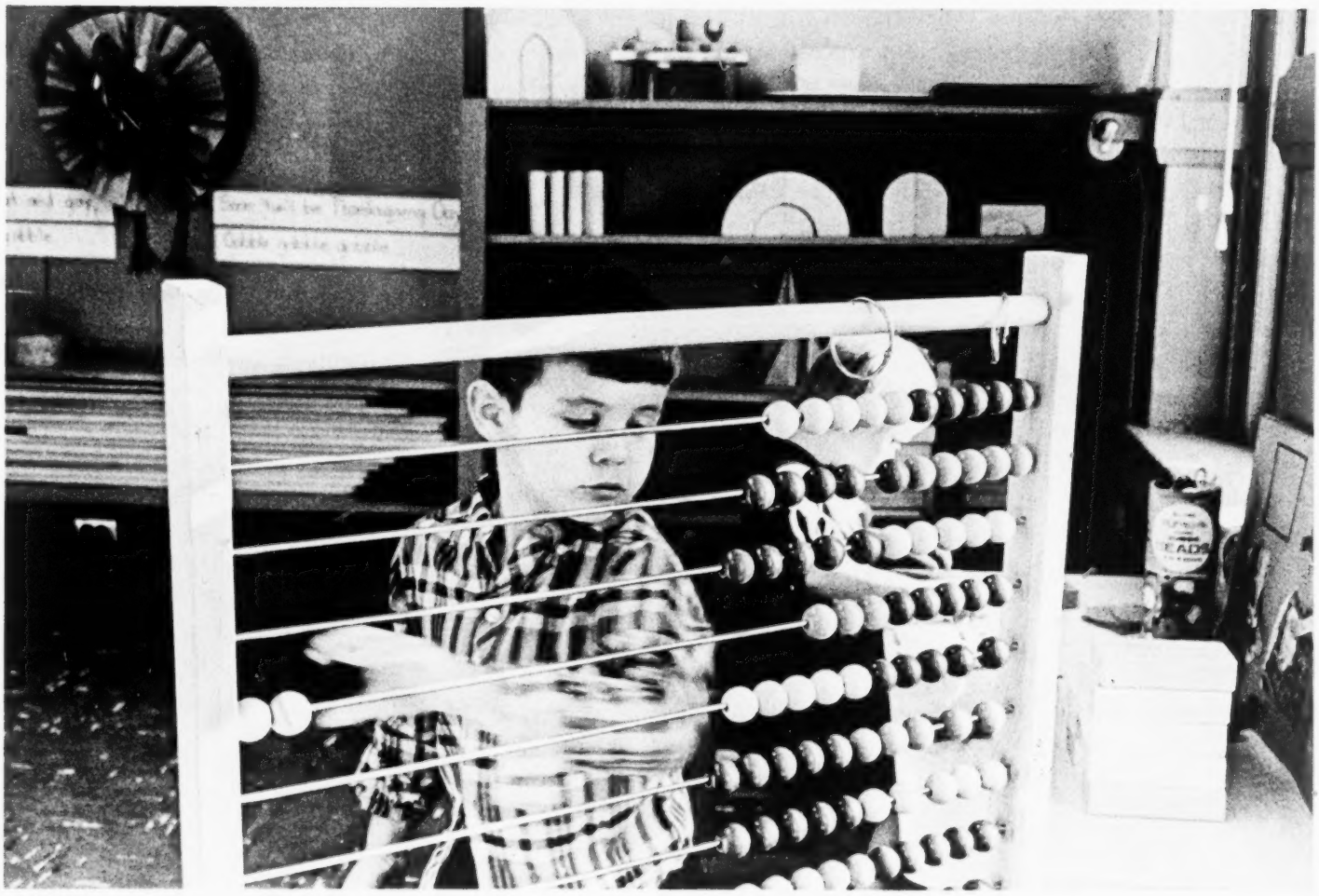
READING

The reading process is so complicated as to defy full understanding. Under normal circumstances, educators have suggested that formal instruction in the process be left to the primary grades, most often the first grade. Visual perception, particularly the ability to discriminate fine distinctions in objects, is believed to be a necessary attribute for tackling formal reading. Sufficient language development is needed also to have a command of adequate word meanings and expression of them in meaningful language patterns. Simple physical development that enables a child to sit long enough to attend to a solitary task is needed.

Even more complicated is the physical ability to hold a book steady. Eye-hand coordination and (left-to-right) directionality are needed. Therefore, it seems that many important tasks that precede formal instruction in reading await the teacher. Research data are not available to show that children who read early are necessarily better readers or enjoy reading more than children who wait until first grade to begin reading.

Therefore, it is recommended that prereading activities probably will be the most appropriate for most children. Special attention and recognition should be given to children who demonstrate or suggest a genuine interest in reading. Equally as important will be the direction given to any child who is already reading when he enters kindergarten.





NUMBER RELATIONSHIPS

Kindergarten children are generally enthusiastic about numbers and number ideas. They enjoy counting, comparing, and playing number games. This natural love for mathematics makes the kindergarten years a delightful place to begin the teaching of mathematical concepts.

Since many kindergarten pupils haven't developed muscular coordination for writing, the greater part of the mathematics program should be of a verbal nature. Where non-verbal responses are required, ready-made mathematics symbols should be available.

The mathematics program should be clothed in concrete experiences. Such items as flannel boards with accessories, manipulation devices, number counting frames, objects for making sets, and mathematics symbols are essential.

Teaching mathematics in the kindergarten should be from a discovery approach. Such instruction is primarily concerned with asking appropriate questions to give guidance and direction to the pupils' thinking. Each child is led through experiences so that he might draw a conclusion of his own.

Children come to kindergarten with different levels of readiness to participate in learning mathematics because of different background experiences, intellectual levels, and interests.

Although the kindergarten mathematics program is informal and often casual, it should be planned. Situations must be created that require use of mathematical ideas.

Experiences in mathematics in a kindergarten program might include:

(1) **Vocabulary**—Words which have mathematical connotation should be discussed. These include: largest, smallest, longest, tallest, same size as, heavier, lighter, above, below, on, front, back, right, left, up, down. Words such as big, little, many, few, tall, short, that are used in a relative sense, should also be taught.

(2) **Looking for Patterns**—Children can be encouraged to discern patterns in geometric shapes, and other manipulative objects. Beads of different shapes and colors may be strung on cord or laces to develop patterns.

(3) **Simple Closed Curves**—Examples of simple closed curves may be discussed. Activities may be provided to determine whether objects are inside or outside of the closed curves, as well as coloring diagrams that represent closed curves.

(4) **Conservation of Number**—Experiences should be provided which assist children to learn that changing the position of objects in a set does not change the number. Knowing how many objects are in the set is not necessary at this level.

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(5) **One-to-One Correspondence** — Children should be encouraged to experiment in placing objects in one set in one-to-one correspondence with a second set in order to determine which set has the larger number or that the two sets have the same.

(6) **Fractions**—Opportunities will develop and others should be planned where children gain some general idea of one-half, and one-third, etc. Such ideas should grow out of experiences with physical objects and verbalized only.

(7) **Geometric Shapes**—Attention may be given to identifying triangular, circular, rectangular and square shapes. These two-dimensional figures have an inside, outside, and a set of points which make up the shape. Such distinctions are important.

(8) **Measure**—Pupils should explore simple ways of measuring and develop the idea that measuring is assigning a number to a physical quantity. Most of their experiences should be couched in non-standard units such as so many steps, pencil-lengths, paper cupsful, string-lengths, rather than feet, pint, pound.

(9) **Solving Simple Problems**—Kindergarten children should have physical models to manipulate and to assist in the solution of problems. Who is taller, Jane or Bill? These two children can be moved together for comparison.

(10) **Number and Counting**—Prior to counting, children should have an abundance of experiences to assist them to learn to associate a number name (oral and written) with sets whose cardinal number is 0, 1, 2, 3, 4, 5, or 6. Numerals on cards should be used where children are not able to write them. When they are ready to write numerals, children should be taught to form them in the following manner:

The natural order of counting numbers may also be included. The ordinal sense of numbers should be delayed until the cardinal sense has been studied.

"Set" vocabulary should be exploited throughout the kindergarten program. Concepts of sets may be woven into the program without undue emphasis, setting the stage for learning mathematics in the elementary and secondary schools.

The teacher should be alert to the number needs of children as they try to build understandings through concerte and meaningful experiences. She will assist in helping children learn to reason and to clarify concepts.

SOCIAL STUDIES

The kindergarten age is ideal for beginning a meaningful social studies program. In fact a major part of a good kindergarten program would consist of learnings and experiences in this area. It is not a question of incidental treatment but of regular involvement with a definite place and clearly defined objectives in daily planning and organization.

Thorough planning of the social studies program does not imply a severely structured one. Broad goals which include helping children understand their society and learning to live as good citizens in that society should be taught in practically every kindergarten experience.

Specific aims and goals of social studies will vary depending on the needs of the community, school, and the individual child. Generally, regardless of needs, the concerns will be values, skills, goals, and knowledge which affect behavior.

Young children come to kindergarten with varying kinds and amounts of knowledge and experiences. As in other areas, each child will build upon these experiences through the activities, play, and work which will assure his respect for himself, and broaden his knowledge and understanding of his relationship to others.

In **Kindergarten for Today's Children,** Wills and Lindberg list the following general goals which should be included in the planning of all social studies programs for young children:

1. Broadening their understanding of family living, developing a greater appreciation for roles and feelings of members of the family.

2. Becoming better acquainted with people in the neighborhood upon whom the family depends and understanding the kind of work they do (fireman, grocer, doctor, etc.).

3. Becoming better informed about community services and how dependent the neighborhood is on such services.

4. Celebrating important days (patriotic, birthdays, etc.).

5. Becoming familiar with modern transportation and communication.

6. Learning about recreation and cultural opportunities in the community (playgrounds, zoos, museums, etc.).

7. Learning to be a good citizen in their relationship to other people (socially acceptable behavior).

A great many children will have had some experiences with these learning areas. As in any other subject, the kindergarten teacher will build upon the knowledge which children have when they come to the group. Many deprived youngsters will need opportunities for community experiences other children have already had. To become acquainted with a policeman, visit a super-

market, or enjoy a trip to the zoo can conceivably be their introduction to an "out of home" area of social studies. The concept of working together in the community and the dependence of the family upon the other individuals or agencies of the community would be significant.

While most authorities agree that social studies in the kindergarten should focus on the immediate environment, they no longer restrict it here altogether. Mass media now bring children news and views of the world in a matter of seconds. Many five-year olds have contacts with people living abroad. By means of television they have viewed events and places of historical interest. Pre-primary children from affluent homes have interests universal in scope. They know about and are interested in hundreds of topics from dinosaurs to rockets or from electricity to life on the moon.

The responsibility of the kindergarten teacher and other adults working with this age child in the area of social studies is staggering. Unlimited opportunities to provide guidance, information, experiences, and direction suited to the varying levels of development can make a tremendous difference in the citizens of tomorrow.

The wide range of interests, the short attention span and the varied abilities within any kindergarten group will dictate the necessity for a loosely structured social studies curriculum. Language, science, music, art, health, and safety concepts and learnings will all be involved frequently in activities designed primarily for developing experiences in social studies.

A unit of study in kindergarten may last for one day or several weeks depending upon the interest of the group. Many times there will be activities of more than one unit going on simultaneously. It is not necessary for all children to participate in all activities related to a social studies topic. Voluntary participation is usually more effective.

Children develop skill and understanding of citizenship responsibilities as they participate in planning. They usually engage more enthusiastically in activities which they suggest or help plan. Five year olds are creative and often suggest ideas which an adult would overlook. A sensitive teacher will use every opportunity to involve children at the proper time.

The use of audio-visual aids is vital in teaching social studies. Globes, films, filmstrips, flat pictures, recordings, tapes, and books are invaluable.

Children understand ideas more clearly when appropriate visual and audio materials are a part of the learning experience. Models, collections, and manipulative devices often enrich the presentation or experience. Frequently it is desirable to use films, filmstrips, tapes, etc. more than once with children this age.

A field trip can be a valuable learning experience in social studies and can make unlimited contributions to the enrichment of the program. Whether it be within walking distance of the school or to a distant place requiring transportation, the trip can be effective in assisting the child in developing desired understandings. Planning and evaluating the field trip is an important part of the learning activity and should involve children as well as teachers and other adults.

People in the community can enrich the social studies learnings of kindergarten children. They may be parents, professional people, or community workers who have had experiences which can be shared with children who are ready to learn. The prime consideration will be the ability of these resource persons to express themselves so that they are understood by this age group. The teacher's responsibility is to prepare both children and the speaker for the visit.

An effective environment can be created in a kindergarten classroom by establishing centers of interest. Appropriate furniture, equipment, and materials which will contribute to learning should be available in each center. For example, a cabinet, stove, table and sink scaled to size in the house keeping center; reading table and book shelves in the library center and musical instruments, records and record player in the music area. Such centers will provide interrelated experiences that may be adapted to the child's experience and maturity. The social studies center will offer many opportunities for the pre-primary child to share toys, take turns, use materials freely, respect the feelings and rights of others, understand his own rights and how to stand up for them, respects rules, follow routine as well as learning about people in other parts of the community, country, and world.

HEALTH AND SAFETY

The daily experiences of young children should foster their health and safety. A safe, healthful environment for daily activities, opportunities for suitable, enjoyable play, and a school program which facilitates mental and physical health are necessary for normal development of the young child. Experience shows that health habits developed during children's early years greatly influenced their lifelong health habits.

A healthful school environment and careful guidance by adults responsible for their activities will encourage pre-primary children to develop desirable health habits. Attitudes toward food, rest, play, cleanliness, grooming, and bodily functions can be influenced by the teacher. Children should be involved in discussions, stories, and songs about health and making health rules by which to live.

The teacher should build sound attitudes toward doctors, dentists, nurses, and others who help them stay healthy.

To insure the health and safety of each child, the pre-primary school staff should:

—give instructions in the formation of health habits as the actual situation arises, such as keeping hands and objects out of the mouth, washing hands after using the toilet, and before eating, covering the mouth before coughing and sneezing.

—give instructions in the safe use of toys and other equipment as the need arises.

—give instructions on wearing suitable clothes according to the weather, eating proper food, resting and exercising.

—be alert to symptoms of illnesses for protection of the group as well as the individual child.

—not permitting the child to become over-stimulated or over-tired.

—provide for rest and relaxation.

—see that children get plenty of exercise, both indoors and outdoors. Young children cannot be expected to sit for long periods of time.

—meet nutritional needs of the children while they are in school.

—insure that the classroom is clean, dust free, well ventilated, with proper temperature, and lighting.

—secure the correct size furniture, especially chairs and tables. Correct posture habits are formed early.

—insist upon a physical examination and immunizations for smallpox, polio, and other diseases as recommended by local health departments.

—maintain current health records on each child which will include previous illnesses, physical defects, allergies, fears and anxieties, physician's examination report, immunizations.

—prepare children for emergencies to keep them safe in case of fire, tornadoes, floods, hurricanes.

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Young children should practice safety procedures so that they will respond quickly in a real emergency without becoming panic stricken.

—be prepared for accidents and injuries. Every classroom should contain a first aid kit for minor injuries or illnesses. The teacher should know where to contact a child's parents or doctor in the event of serious injury or illness.

—be creative and alert to every opportunity to teach health and safety.

Children who are not well and healthy cannot derive full value from kindergarten or pre-school experiences. The effective teacher should plan and implement an adequate program for health and safety throughout the year.

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ART

Art education is a vital part of a program for young children. The real value of art activities lies primarly in the process of creation, rather than the finished product.

Creativity is considered to be the key word in the art program for youngsters. Kindergarten is one level where good teachers can promote and encourage creativity without the pressure of prescribed academic requirements. It is at this age that imagination, curiosity, ingenuity, and creativity are part of the child's total personality.

The disadvantaged and deprived child may not have had the experiences which will make these characteristics evident from the beginning. An opportunity to be exposed to the environment, materials, equipment, and experiences conducive to total development will soon bring to light the natural characteristics of the four and five year old. Feelings which cannot be expresed with their limited vocabulary can be splashed out in colors or worked out in clay. Creating something different from any other production can contribute to satisfaction and widened horizons.

The sense of accomplishment derived from successful manipulation of art media can contribute greatly to the building of self-confidence.

It is most important that the child's art work be valued 'for itself and not compared to someone elses' or to an adult model. The child carefully painting every inch of his paper yellow—the child mixing blue and yellow to make green—the chunks of clay rolled into balls with little resemblance to anything—black smudges of finger paint spread onto the snow white paper with the hands and arms—all of these art activities have meaning to the young child.

Foundations for later learning are laid through experimentation and practice in art with guidance from a competent teacher who knows the value of freedom of manipulation. The child learns early the possibilities, limits, and control of the media which he uses. Small fingers learn to hold the paint brush, crayons, pencils, and scissors. Large balls of clay can be made into small balls to resemble marbles, or long rolls to form snakes, and back to large balls again. These simple learnings are important.

There is no one certain way recommended for all children to create. Each child's art will be different—determined by his past experiences, interest, and degree of motivation. Coloring books or ditto stencils to color in dictated step-by-step procedures restrict thought and inhibit self-expression. They should not be used with young children if creativity, self-expression, and natural muscular

growth and coordination are desired goals.

Motivation is another key word in the success of an art program for young children. Largely the responsibility of the teacher, motivation is made easier if she knows the interests of the children. The teacher must provide frequent motivational activities such as a walk on the playground, a field trip by bus, music, poetry, films, dances, stories, or objects brought into the class.

Adequate space must be provided for art activities. Crowded conditions which cause problems with the use of various media can discourage participation and cause discord among the "artists." Children take turns using the art area as they do all other centers. It would be a rare occasion when all children would be involved in using the same art medium at the same time.

If at all possible, the child should be allowed to participate in an art experience which is meaningful to him as long as he wishes. If limits are to be set as to time, it is well to set them before a child begins to work. For example, Ruth is told that today she may paint only one picture because John and Suzie want to paint. There are usually few problems in letting everyone who wants to have a turn since a long period of time is available and the space is hopefully large enough for several children to participate simultaneously.

The teachers or adults working with young children must be aware of what is desirable in the way of guidance and encouragement. It is necessary to show children how to paste, use the scissors, hold the brush or crayon, roll the clay, etc., and be available for supervision. She should not make models for children to copy nor draw figures as patterns. Encouragement and honest praise, such as "You have made an interesting design," or "What pretty colors you have used," is usually adequate. Adults should not ask, "What is it?" Perhaps an invitation to "Tell us about your picture," would be better.

Some limits and rules for the use of art materials and conduct in the center should be set early in the year. Children cannot be allowed to splash paint, throw clay or crayons, etc. Necesary limits will vary according to classroom size, ratio of adults to children, and behavior characteristics of the group. In desirable weather, art activities can be moved out-of-doors.

A variety of art experiences can be presented over a period of several days. There is no reason why a given art activity, such as painting with tempera, should be available every day. It is not necessary for clay to be used every day. Nor is there reason why a child should participate in a given art activity. He can paint if he chooses, but does not have to. The observant teacher will see that sooner or later each child is encouraged to have experience with all media available.

A variety of art media should be provided. Each child will thus be able to find at least one medium which he can use well enough to express his ideas. All children will become familiar with many materials for creative expression.

Crayons: thick, large, non-toxic crayons will be needed for the poorly coordinated children. Those who are experienced in using this medium will find standard size crayons more satisfactory. Paper for crayon work should be large enough for bold free strokes (12 x 18).

Chalk is easy to use and glides smoothly over paper. Therefore, it is probably more conducive to originality than crayon. Chalk may be used dray on dry paper or it may be dipped in water and used wet on dry paper. White chalk used on colored construction paper or black chalk on white paper is effective. A fixitive used on the chalk drawing will add to its permanency. This medium will require protection of clothes and handwashing.

Tempera paint. Either powered tempera paint or ready-mixed tempera can be used at the easel, on the table or floor. Newsprint, wrapping paper, newspaper (18 x 20 is the recommend size) will take tempera. Flat brushes with long handles invite strong, free strokes. Although tempera paint washes up easily, newspapers to protect tables or floors will insure more freedom for the child who may be concerned with the "mess" he makes. Vivid, bright colors of tempera are delightful to the beginning painter.

Sponge painting is a favorite with young children. Small pieces of sponge clipped between clothespins dipped in tempera and then dabbed on newsprint

produce designs of differing shapes and colors.

Starch painting or finger painting. Commercial finger paint or liquid starch to which powdered paint has been added can be used for finger painting. Homemade starch paint is most economical but is also the most trouble. Recipe for this mixture is easily available.

Paper for finger painting should be s m o o t h, glossy, and non-absorbent. Commercial finger painting paper, glazed shelf paper, or oil cloth may be used. Large pieces (18 x 24) are most desirable. Since this medium is messy, children's clothing should be protected, sponges and water readily available, and drying places for art work provided. As starch paint dries, the paper will buckle. It can be flattened after it has dried by a warm iron applied to the unpainted side.

Clay. Oil base and water base clay will provide material which children can manipulate. Play dough is also a favorite, but more expensive.

The oil base clay is easiest to work with and can be used again and again. Water base clay can be allowed to harden, painted, and taken home by the children.

The teacher should demonstrate how the clay is worked to be made pliable, but refrain from making models or patterns to be copied.

Clay should be kept in covered cans to keep clean and moist. Individual masonite clay boards or work tables covered with plastic are desirable for work with clay.

Paper, scissors and paste. Colored construction paper, pictures from magazines, wallpaper samples, scraps of cloth, and bits of yarn are a few materials which can be cut and pasted. Blunt-pointed scissors are generally safer, but a few pairs with sharp points may be used under adult supervision. Inexpensive past will serve the purpose.

Many four and five year olds will need careful, patient supervision and encouragement while learning to use scissors and paste. This may be their first experience with these materials.

At the beginning of the year, the teacher will need to give help and guidance in distributing materials, putting on aprons or smocks, cleaning brushes, displaying finished products, etc. The objective should be, however, to help each child to become more independent and do as much for himself as possible. The more he does for himself, the greater the satisfaction of accomplishment in his artistic "masterpiece."

Children can learn early to appreciate the efforts of others. Art work done by their peers can be respected and discussed. An appreciation of art and the world's famous painters can begin early. Exhibiting masterpieces appropriate for children with interesting interpretations and conversations about them can lead to interest in and appreciation of the masters.

Art activities are basic for the development of happy, wholesome and creative personalities. The competent teacher will provide many art materials and plan varied, imaginative art activities.

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SCIENCE

Science is one of the most significant areas of development for today's young children. Wonder and curiosity are characteristics typical of the age. The questioning, inquiring, and exploring mind is the foundation upon which a science program is built.

Many opportunities arise during the kindergarten day to arouse interest in science, to acquaint children with things that make up the world in which they live, and to develop the non-compartmentalized nature of kindergarten education, it seems next to impossible to consider science as separate from any other curriculum area.

The kindergarten classroom will have a science center or area where equipment, collections of leaves, stones, seeds, and other related items are housed or exhibited. Many other opportunities for the teaching of science lie outside the classroom. The teacher who knows her community will be aware of places to extend classroom experiences and persons who can assist her in providing them. Children's experiences must give meaning to basic concepts through the use of all of their senses—seeing, tasting, smelling, touching, and hearing. Each experience influences their attitudes toward life and the world as well as increasing their knowledge and understanding.

The teacher's own interest and enthusiasm for science and the world will likely determine the success of the program.

The good kindergarten teacher will constantly evaluate, reinforce, and extend as she asks:

—How well do I know each child?
—What are his interests?
—In what areas does he have limited experiences?
—How can I extend his interests through books, pictures, new materials, equipment, questioning, or talking with him?
—Do I ask him questions which help him see why things happen?
—Do I motivate him to find the answers or solutions to his simple problems instead of telling him the answers?

The science program is built upon everyday needs and interests of children, such as:

(1) Experiences with plants and animals: caring for pets and growing plants; observing how animals move, what they eat, the sounds

they make, where they live, how they take care of their young; what plants and animals need to live and grow.

(2) Exploring the environment: observing and discovering various changes in environment, changes in weather and seasons and how they affect plants and animals; experimenting with soil and water; observing types of life, i.e. fish, amphibians, birds, reptiles, and mammals.

(3) Reacting to physical phenomena: experimenting with magnetism, friction, static electricity, evaporation, melting, boiling, things that float.

(4) Learning about simple machines and how to use them: experimenting with toys, pulleys, wheels, pliers, saws, hammers, shovels; observing cement mixers, derricks, trains.

(5) Using equipment to study the environment: experimenting with prisms to refract light, thermometers, hand lenses to look at cloth, soil, leaves, insects.

The child can understand only what his past experience and knowledge can comprehend. Therefore, too much information before he is ready or has a need can only cause frustration. Knowing each child is essential.

To encourage young children to maintain their natural interest in observation and questioning, the adults in their homes and kindergarters should help them find the answers by exploring and experimenting.

Suggested science equipment is listed in the chapter on physical facilities.

MUSIC

Introducing a child to the world of music can be one of the most rewarding experiences in the kindergarten program. Through carefully planned activities in music, a child becomes sensitive to sound, develops muscular coordination of his entire body, participates willingly in group activity, and becomes sensitive to the esthetic expression of beauty in his daily environment.

The basic aim of music education in early childhood is the development of musicality. A child becomes sensitive to music through a variety of daily experiences which includes singing, listening, playing simple instruments, rhythmic activities, and creative experiments which encourage individual initiative and stimulate imagination.

Successful kindergarten music proggrams are those in which short periods of time are given to musical experiences at various intervals throughout the school day. Teachers should look for the right moment to sing a song, move more to music, play a musical game, or listen to a fine recording.

It is important that children have a variety of successful experiences with simple musical learnings to encourage them to explore and discover new insights for themselves. Teachers should never devote excessive amounts of time to drilling children on any aspect of music to prepare them for public performance. Exploitation of children for the sake of entertaining adults may destroy all positive attitudes acquired in the very early stages of musical growth.

There is ample evidence to support the notion that kindergarten pupils can and do enjoy devising their own rhymes, free-verse, and melodies (sometimes both lyrics and melodies). Other activities include:

1. Listening to the teacher sing.
2. Listening to recordings.
3. Listening to instrumental music.
4. Playing with classroom instruments to develop rhythmic response and awareness of varied tonal qualities.
5. Responding physically to music (clapping, rocking, swaying, swinging, crawling, dancing, walking, sliding, running, trotting, jumping, bouncing, galloping, hopping marching, skipping, etc.).

The teacher is responsible for developing the child's own natural rhythm and spontaneous expression in music always keeping in mind that perfection of performance is not the goal.

Although talent and training in music is an asset for a teacher, neither is essential for success in providing desirable musical experiences for the young child. Numerous recordings, tapes, audio-visual aids, guides, and manuals make it possible for the teacher to provide many and varied musical experiences even

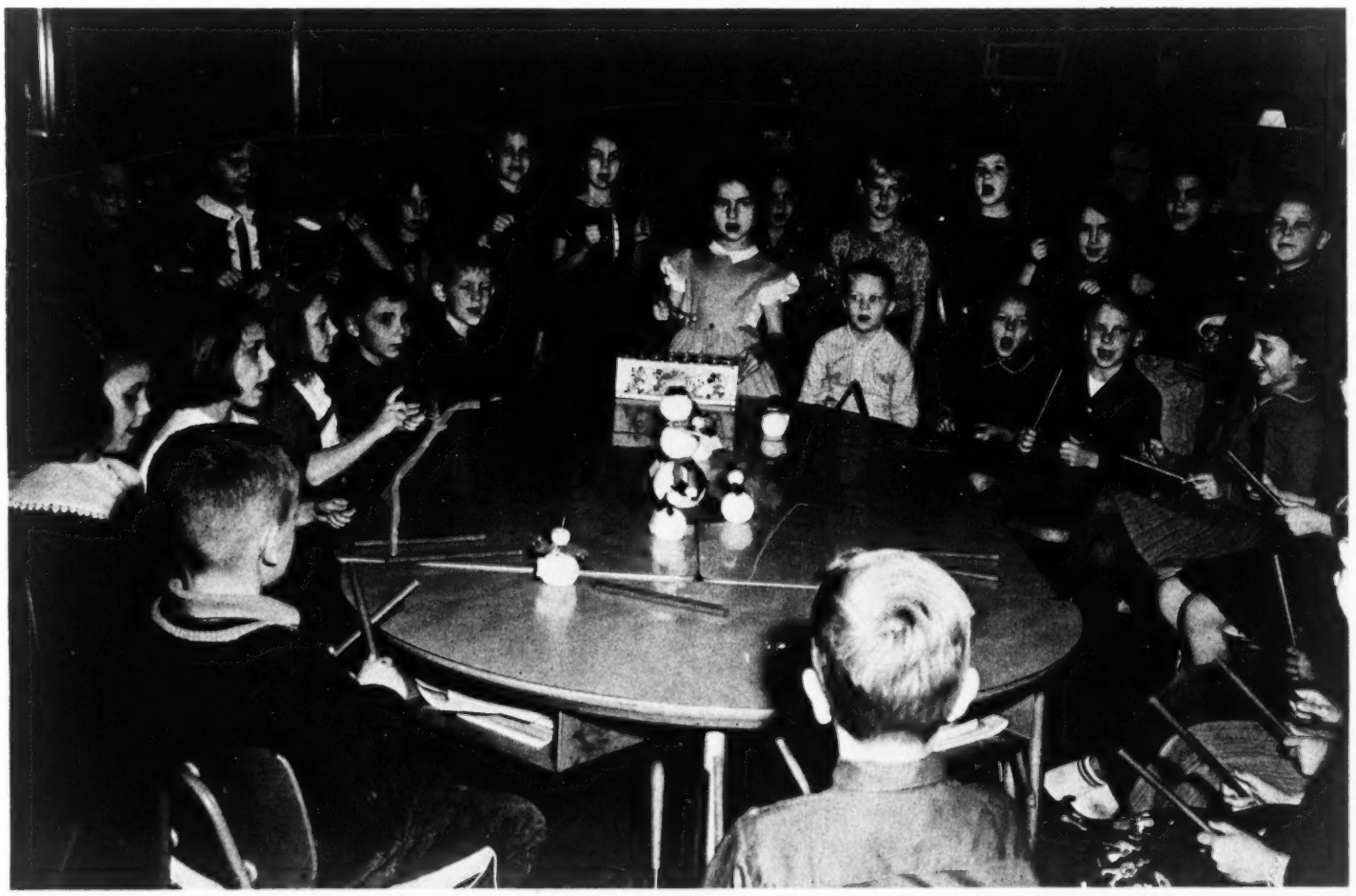
though her musical training or background may be limited.

Music woven into the program at appropriate intervals during the day can deepen the child's feelings of security, stimulate creativity, and provide a sense of accomplishment. These early experiences may be the beginning of attitudes toward music for life. The teacher gauges the length of time for group music activities by the needs of the group. Some children may prefer to explore music individually and at varying time. Setting for music time should be comfortable and informal (such as sitting on a rug or gathered around the piano). Activities should be short and easy-to-follow. The relaxation and enjoyment that should be a part of all musical activities provide an ideal atmosphere for learning.

Space and equipment should be provided for musical and rhythmical activities. An area in the kindergarten classroom designated as the music center may include: a piano (desirable, but not necessary), autoharp, rhythm instruments (cymbals, drums, bells, rhythm sticks, sand blocks, tambourines, triangles), record player, records (for singing, dancing, appreciation), listening posts, tape recorder and tapes.

If the budget is limited, the rhythm instruments may be made by the teacher. Other creative music materials may include balls, hoops, scarves, hollow blocks, balloons, ropes, poles, etc.

Through music the child can transcend the daily barrage of language, frustration, or sheer reality. An added educational benefit is that it also serves as a means to further develop listening skills and expressive behavior desirable for learning other subjects.



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PHYSICAL EDUCATION

Objectives of a physical education program for young children are to develop good attitudes toward physical fitness, to exercise large muscles, and to gain poise and body control through enjoyable activities.

It is not recommended that the pre-primary curriculum include special classes in physical education. Nor is any special period of the day set aside for these activities. The kindergarten or pre-school day includes much physical activity which can take place in the kindergarten room, on the playground, or in a special activity room or space.

Children of this age experience rapid growth in their large muscles. They are extremely flexible due to the space between the joints and the longer, less firmly-attached ligaments. It is the time to help children develop well-coordinated, flexible bodies. Learning motor skills will play an important part in their social lives.

Most children thrive on activity and will change frequently from one to another. Teachers have the responsibility of providing developmental activities that furnish opportunities for change.

During the outdoor play period, children are free to use such outdoor apparatus as jungle gyms, slides, horizontal ladders, balancing boards, etc. They should also engage in running, jumping, kicking, throwing, lifting, sliding, pushing, pulling, rolling, and tumbling. Simple games, free ball activities, marching, stunts, and relays can also be performed. These physical activities develop fundamental body movements.

Indoor activities may include dexterity games (using hands, arms, feet), creative play (imitating birds, rabbits, elephants, frogs, etc.), song play (such as "The Farmer in The Dell," "I'm Very, Very Tall," "Let's Go Walking"), and other active games.

Children's natural rhythm and the desire to imitate provide many creative activities. The use of a piano and records makes a program flexible and exciting.

Dividing the class into small groups will make it possible for each child to participate in activities designed to help improve coordination, master movements and skills, handle play equipment, and develop such social attributes as team work, fair play, sharing, etc.

The Guide for Teaching Physical Education, a South Carolina State Department of Education publication, includes many games, activities, suggestions for programs and equipment for pre-primary children.

THE LEARNING ENVIRONMENT

Physical facilities should be safe, comfortable, and livable for active children and should provide the setting for a rich and continuous living-learning environment. The environment, consisting of outdoor space, indoor space, furniture, equipment, and materials, is designed to encourage children to learn, teachers to teach, and other participating persons to interact in a natural meaningful way.

Proper allotment of space to class enrollment can better insure that each child is visible as an individual and effective as a member of the group. A kindergarten class numbering 15 as a minimum—25 as a maximum is increasingly accepted as being of manageable size. The space provided indoors and outdoors should be flexible and adjustable. Permanent installations should be minimal; furniture and equipment should be versatile and movable. A wide variety of learning experience calls for facilities, materials, and supplies that will invite experimentation and promote creativity.

The following suggestions are worthy of consideration in planning the physical facilities for maximum effectiveness:

SITE

—located in the elementary school, if possible.
—attractive surroundings, or potential for being made attractive.
—healthful location—free from industrial fumes, excessive dampness, dust, smog, and traffic noises.

INDOOR SPACE

Classroom

—located on ground floor
—adequate space—40-60 square feet per child
—easy access to outdoor area
—restroom facilities in room

Walls

—easy to clean
—pleasing color of non-glare finish and light enough to reflect 50% of light
—sufficient space for display, etc. at children's eye level
—full-length mirror extending to floor
—adequately insulated against heat and cold

Floors

—attractive and usable covering, preferably carpeting
—clean, warm, and draft-free
—area adequate to enable all children to sit at the same time

Lighting

—louvers, blinds, or overhangs to control excessive light and glare
—window lighting or artificial lighting to provide 70 foot candles of light at work level

Storage

—built-in or portable shelves, cupboards, or closet; some designed for use by pupils
—space for cots or children's rugs to be stored
—open-front storage cubicles for each child (with coat hooks) preferably in small adjoining room opening to playground

Doors
—single action with minimum amount of glass
—must swing out
—easily managed by children

Safety factors
—free from fire hazards
—easy exit directly to outside in case of fire
—enough electrical wiring and outlets to avoid use of extension cords or overloaded circuits

Multi-Purpose Room
—small room for quiet play, isolation of children who are ill, teacher's office and/or conference room

Observation Area (if possible)
—one-way glass
—sound system
—outside entrance
—draperies or blackout shades (if window is located in observation booth)
—carpeting
—writing area
—chairs

Restroom
—size—5 square feet per child when in maximum use
—child-sized with toilets 13 inches high; washbowls 25 inches high
—window or mechanical exhaust fan for proper ventilation
—ceramic tile floor and wainscot
—paper towels, soap, toilet tissue
—wastebasket

FURNISHINGS FOR CLASSROOM

Tables
—sturdy lightweight with washable tops
—20-22 inches high
—enough to provide workspace for all children at one time
—small enough to be used separately for 4 to 6 children
—higher table for standing activities
—trapezoidal or rectangular (24 x 48") in shape

Chairs
—lightweight stackable posture built chairs; 10"-14" high (varied height)

Sink
—double; near work area (one side shallow, one deep)
—cold and hot water with mixing valve

Drinking fountains
—20-22 inches high; vitreous china or stainless steel

MATERIALS AND EQUIPMENT

Library Area
—variety of well-selected story and picture books
—pictures (child, family, and adult activities; animals, plants, birds, natural environment, special days and seasons)
—foam-rubber cushions covered with washable vinyl for library chairs
—high shelf near door for reference material for parents
—low movable bookcase for children's books; library table

Music and Rhythm
—record player of good quality
—records (carefully selected)—provide storage space
—musical instruments—bells, sticks, drums, triangles, cymbals, and tone blocks
—piano and/or autoharp, if possible
—scarves or properties for creative rhythms

Woodworking
—soft pine wood; assorted textures of sandpaper
—hammer, nails, screws, bolts, nuts, sharp saw, screwdrivers, augers
—workbench with attached vise

Home and Family Living
—child-size furniture—tea table and chairs, stove, sink, refrigerator, cooking utensil set, tea set
—dress-up clothes, aprons, suitcase, ironing board
—cleaning tools
—dolls, composition or cloth, 12" or more; doll carriage and bed—large enough for children
—measuring cups, funnels, cans, plastic bowls, etc.
—telephone

Blocks and Building Center
—solid block sets in units 2x3x6", 2x3x12", etc.)
—large hollow wooden blocks
—cars, trucks, airplanes—large and sturdy
—toy animals and dolls to use with blocks
—interlocking trains

Modeling
—wooden or formica clay boards, or table with plastic top
—tongue depressors to aid in modeling
—clay jar and cover (heavy earthern crock or unbreakable polyethylene clay container with cover and handle)
—clay, play dough
—potters' clay

Cutting
—scissors, mostly blunt pointed; a few pair of left-handed scissors; all sharp enough to cut cloth and paper

Paper
—roll white butcher paper, 24" wide (glazed on one side)
—colored and white construction paper, manila in 12" x 18" size
—finger paint paper or heavy glazed shelf paper for finger paints
—newsprint on rolls or in 18" x 24" sheets
—old newspapers
—paper towels for drying and for papier-mache
—tissue paper, white and colored
—tagboard for puppets and for mounting pictures
—roll brown wrapping paper 30" wide with holder
—brown paper bags
—precut gummed strips and shapes
—confetti for mosaics

—cleaning tissues
—aluminum foil, wax paper, saran wrap

Painting Supplies

—pan for wetting finger paint paper
—pail and sponges for cleaning up
—string, spools, sponge, potatoes, carrots, etc. for use in painting
—brushes, long handled, sturdy bristles around one inch thick; assorted sizes and stiffness (not watercolor brushes)
—dry tempera paint in assorted colors
—powdered or prepared finger paint or ingredients for homemade finger paint
—oil cloth, plastic glazed shelf paper, or commercial finger paint paper
—double easels or inclined wall surface with clips to hold paper or ample floor and table space
—plastic, metal, or disposable plastic containers suitable to mix and store paints
—salt shakers to hold dry tempera to add to finger paints
—suitable place to dry paintings—clothes lines, fences, or shelves
—felt markers in assorted colors

Drawing

—one inch chalk in assorted colors; felt erasers, chalkboard
—think non-roll crayons 4"x7/16" hexagonal: red, yellow, blue, green, black
—thick lead primary pencils
—felt marking pens in assorted colors
—odds and ends of cellophane, tinfoil, ribbon, lace, wallpaper, cloth, etc.
—waterproof aprons
—potters' clay (moist); may also be purchased dry

Pasting

—firm white paste in large jars; small covered containers that may be filled when needed
—paste stick and paste brushes
—wheat paste, powder or other nontoxic paper hanger paste for papier mache
—liquid starch
—wood glue for use in construction
—cloth, sewing supplies, craft materials
—yarn in assorted colors
—light twine and strong cord
—needles, pins, thread
—glitter, pipe cleaners, rick-rack, sequins, ribbon, lace, braid, bias tape, etc.

Other arts and crafts supplies

—insect spray gun or toothbrushes for spatter painting
—tongue depressors
—flannel, cardboards, plywood boxes for flannel graph
—wire coat hangers for mobiles and foundations for papier-mache
—variety of cardboard boxes, cartons, bottle tops, buttons, corks, feathers, toothpicks, spools
—juice cans, milk and ice cream cartons, paper bags, paper plates, glitter

Manipulative Equipment

—puzzles and puzzle rack
—geometric form boards with squares, circles, triangles
—numeral and number matching frames

—3-dimensional letter and numeral forms; rods; counting frames; abacus
—form board and card games identifying likenesses and differences
—board games with simple rules
—card games such as Animal Lotto, The House that Jack Built
—tiddly winks
—word and picture match games
—blocks: table-sized in colors; dominoes 3"x6"; parquetry; interlocking and snap in blocks
—pegboards and pegs
—wooden beads, shoe laces, pop-it beads, home made beads, macaroni and dye, spools
—color cone
—shoe on board to lace
—cloth hand-puppets, stick puppets
—miniature wooden train, truck set

Nature and Science

—display table or cabinet and shelf combination
—boxes for seeing, feeling, smelling, tasting, and or hearing
—stones of various sizes, shapes, textures
—seeds, burrs, acorns, cotton balls, etc.
—shells of various sizes, shapes, designs, colors, sounds
—fur, velvet, silk, wool fabrics; sawdust, flour, salt, sugar, sponge, wood, leather, sandpaper
—aquarium and terrarium with supplies
—potted plants and plant seeds
—cages and pens for pets, animal visitors, containers for insects
—rabbits, gerbils, chickens, birds
—gardening tools, flower pots, watering cans, hose
—bird feeding stations and bird houses
—prism or cut crystals, kaleidoscope, simple spectroscope
—magnifying glass on tripod
—magnets and objects to attract and repel
—indoor and outdoor thermometers, weather cane, anemometer, barometer
—compass
—calendar, sundial
—measuring containers for pint, half pint, quart
—ruler, yardstick
—scales, weights, balances
—pulleys of various kinds and sizes
—batteries and bells
—old clocks, machinery to be taken apart
—water play materials such as bubble pipes, dishpans, pails
—boards with mounted lock and key, hook and eye, door catches, and other familiar objects
—egg beater
—gyroscope
—tire pump, inner tube, tire gauge
—plumber's kit
—incubator

Rest Time—Equipment for Reclining
(In order of comparative cost)

—mats made from newspaper or cardboard and covered with cloth
—bath towel
—small rug
—folding foam rubber mat
—canvas cot with tubular frame

Snack and Cooking

—food preparation center which meets health department standards
(This can be the school cafeteria)
—conveniently available refrigeration
—a stove or an electric frying pan and hot plate
—juice pitchers
—paper plates and cups

Office

—typing paper, graph paper, lined cards, carbon paper
—paper clips, fasteners, punch, stapler, staples, thumbtacks, pins, rubber bands
—rulers, yardsticks, tape measures
—felt marking pens in assorted colors
—masking tape
—file for teacher

Housekeeping

—brooms, floor brush, plastic sponge, wet and dry mops, dustpans of both adult and child size,
—paper towels, cleaning tissue, cheese cloth
—wastebasket and trash can
—soap, cleanser, basin trays
—vacuum cleaner

Audio Visual

—listening station
—tape recorder, commercial tapes, blank tapes
—access to radio and television sets
—flannel board with characters for variety of stories
—magnetic board with letters, numbers, pictures, and extra magnets to use on original materials
—floodlight and sheet for shadow activities
—containers for flowers
—collection and exhibits of materials to go with planned lessons

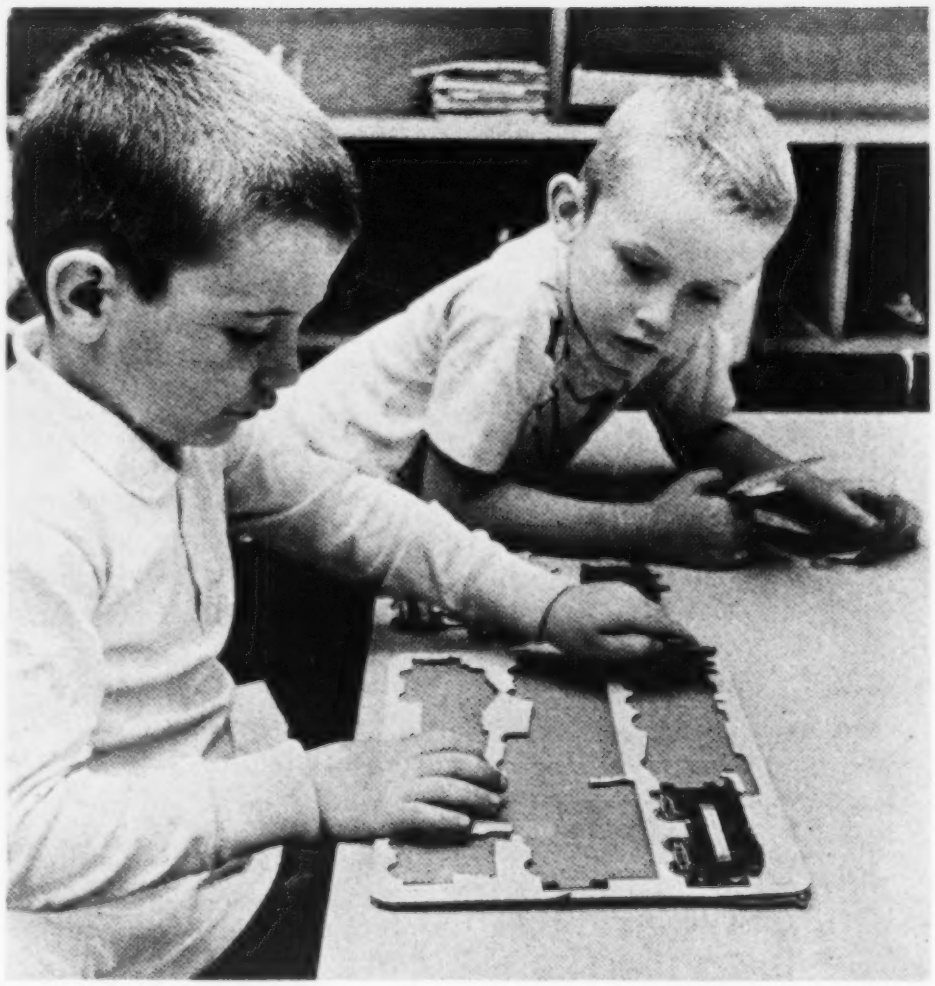
OUTDOOR SPACE

Playground

—minimum of 100 square feet per child
—easily accessible and safe for active play
—fence, hedge, or similar protective boundary
—separate, if possible, from the elementary children's play area
—landscaped to define activity areas
—shade tree or shelter against hot sun
—covered area for rainy weather
—storage area for movable equipment
—hard level surface for wheel toys
—soft surface for gardening and digging
—resilient and nonabrasive surface for climbing equipment
—well drained sunny and shaded areas free from rocks and other accident hazards
—outlet for running water necessary for water play

Outdoor Equipment

—equipment should be strong, sturdy, free from sharp edges and splinters; properly constructed and installed; and meet established standards
—jungle gyms, climbing towers or monkey bars
—ladders (with hooks or cleats to fit over bars, or against trees or boxes)
—safety ladders with steps on both sides
—ladder on sliding boards
—climbing ropes (splinter free, suspended from well-braced, securely anchored frame; fastened at top and bottom)
—ropes knotted every two feet for footholds
—ropes without knots
—rope ladders
—smooth climbing and sliding poles
—inclined boards
—walking boards, balance rails
—horizontal bars, low tree limbs, swinging ring
—puddle jumpers (large cans, one for each foot, with long ropes attached for children to grip as they walk with cans beneath their feet)
—teeter-totters
—packing cases, empty nail kegs with both ends removed, sections of large pipe
—oil drums with both ends removed
—trampoline with handles
—wading pool to use in warm weather
—saw horses
—hollow blocks, play boards
—pulleys
—hose (assorted lengths)
—hats (fireman, sailor, farmer, etc.)
—water pump (used but sturdy)
—saddle (used but sturdy)
—rowboat (used)
—washtub
—pails
—automobile and tractor tires and tubes, tire pumps
—tree trunks with large limbs make



excellent climbing apparatus when stripped of small branches

—variety of large and small balls

—garden tools

Toys

—sturdy, nontoxic

—tricycles, bicycles with training wheels

—wagons large enough for child to ride

—large and small balls

—bean bag

—child-sized vehicles

—pogo sticks

—garden tools; rake, spade, trowel, play mower

—workbench of correct height, soft wood, hammers, saws, nails, screws

—rocking horse, boats, boards, tubs

—water play toys

—sandpile toys—sieves, colanders, molds, pots, cans, cars, trucks, boats, funnels, wooden spoons, pans, flour sifters, pails

Although the above list is comprehensive, it does not include all materials and equipment which could contribute to an effective program; neither is it compulsory to have all materials and equipment listed to provide a good program.

EVALUATION

Evaluation means many different things to many parents and educators. When one mentions evaluation to some people, a red light shines and grades A, B, C, D, or F appear in the sky. Standardized and teacher-made tests are sometimes considered synonymous with evaluation.

Evaluation of school pupils may encompass the above, but in actuality, it also controls the next move of pupils, thereby becoming the most important external aspect of education to the learner.

Early childhood education programs are designed in flexible blocks. When considering how to evaluate children, the teacher should answer the question "For whom and why I am evaluating?" Reasonably, evaluation is **for the learner** and should facilitate learning and teaching. The objectives of the program should be stated in careful terms and evaluations made to determine whether or not the goals have been achieved.

Generally the teacher, pupil, and parents are concerned with the evaluation process. Parents are often in the dark with respect to many interesting and exciting aspects of kindergarten programs. Teachers have the responsibility of interpreting the goals and actual learning activities to parents. When this is accomplished, the teachers' task of reporting in an evaluative manner becomes easier.

When goals of the program are established, checklists can be devised that cover them fully. Teachers and assistants then make regular and consistent daily observations of the children. In addition to keeping a checklist of observations, teachers will find anecdotal records a big help in monthly evaluations from September to June. Checklists and anecdotal records on each child also focus the teacher's attention on all members of the classroom group.

In general, the most effective means of interpreting evaluations seem to be teacher-parent conferences regularly scheduled throughout the school year. The teacher keeps a folder of daily anecdotal records, checklists, and samples of production for each pupil. During the conference, the teacher uses this data to discuss with parents the progress of their children. Teachers can set the tone through careful planning of positive remarks. The typical report card is not needed since parent-teacher conferences serve the original purpose behind report cards. The checklist will show progress and problems more graphically than grades possibly could. The checklist will include intellectual, physical, social and emotional growth of pupils. A happy face is as important as a good painting at the easel.

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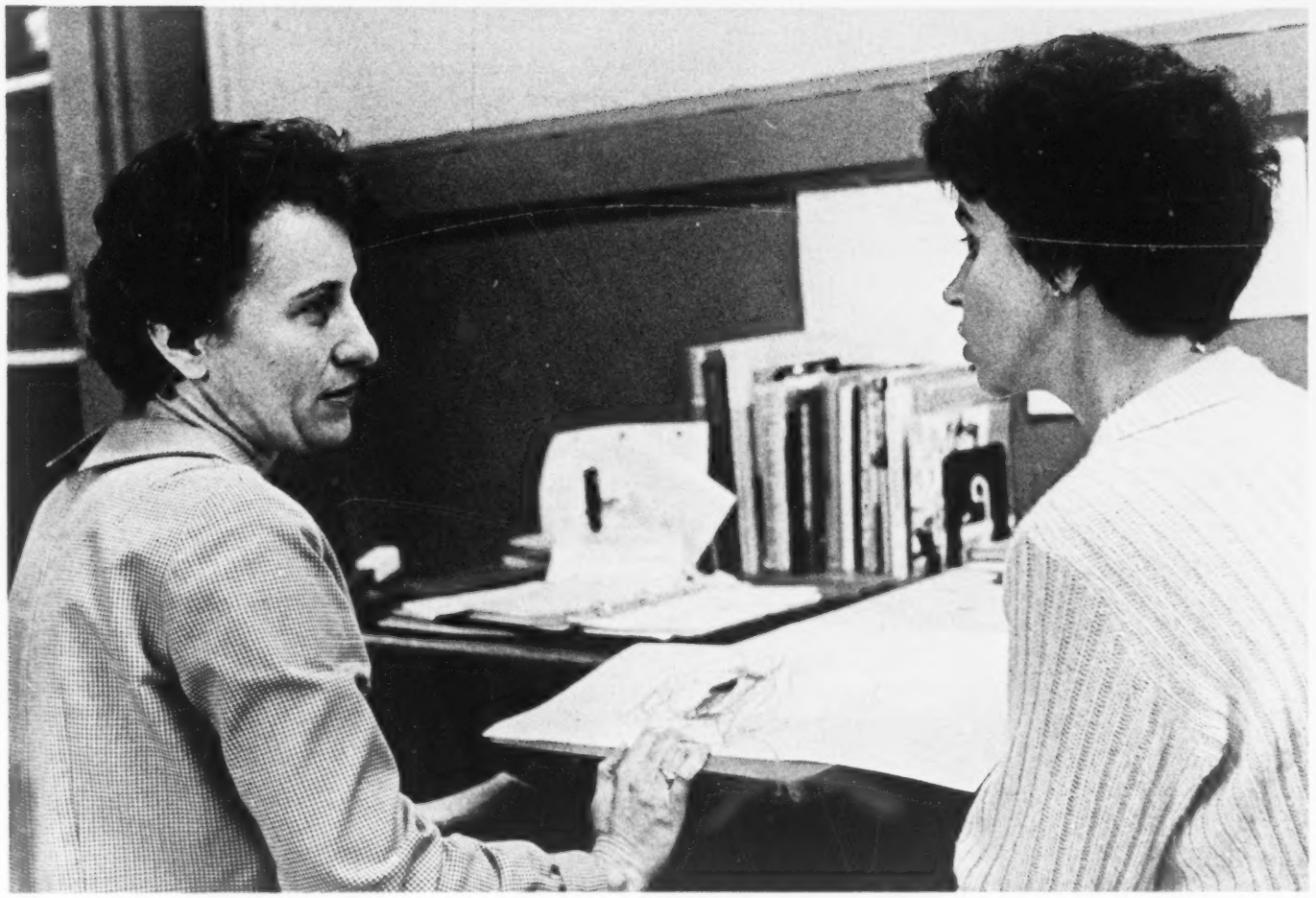

WORKING WITH PARENTS

A major goal of all programs for young children is to involve parents actively in the program. The parent-teacher conference is only one way that communication is built between school and home. Many teachers visit every child's home and later talk with parents on the telephone to reinforce the visit.

Parents should feel free to visit the classroom at any time. Regular visits can be scheduled to avoid a stampede of all parents on the same day. Teachers find it beneficial to meet with small groups throughout the school year. Parents can serve as aides and go on field trips around the community. The teacher can send home newsletters each week reporting books read to the children, new songs sung, places visited, guests during the week, experiments, and discussions held, and reports of individual projects.

Most of all, keeping parents informed and creating a partnership is the best insurance for good programs and better developed children. Almost all parents are interested in their children. When a mutual situation of trust is established, the teacher can serve as a real resource to parents. After all, the teacher is aware of the latest developments in child psychology and curriculum. She can offer hints to parents and interpret behavior of their children from an unbiased viewpoint. In return, parents can serve as important agents in interpreting to the general public the importance and advantage of early childhood education.

If parents are pleased about their children's initial school experiences, the entire elementary program will reap the benefits.

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SUGGESTED SOURCES OF PAMPHLETS AND BULLETINS

Organizations listed may be contacted for their publication list. Pamphlets available at nominal cost, cover a wide range of information, including items on general child care, creative experiences, equipment, child rearing, and various problems connected with nursery and public schools.

Association for Childhood Education International (ACEI)
3615 Wisconsin Avenue, N. W.
Washington, D. C. 20016

Child Study Association of America
9 East 89th Street
New York, New York

Department of Elementary-Kindergarten-Nursery Education
1201 16th Street, N. W.
Washington, D. C. 20036

National Association for the Education of Young Children (NAEYC)
1629 21st Street, N. W.
Washington, D. C. 20009

Society for Research in Child Development
5750 Ellis Avenue
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